

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026899**Date Inspected:** 15-Dec-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

At the start of the shift this Quality Assurance Lead Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) Quality Control (QC) personnel. The observations and inspections were performed as noted below:

A). This Quality Assurance Lead Inspector (QALI) assigned the QA Inspectors to the following, but not limited to the work station(s) listed, to observe the welding and the QC inspection of the following:

Douglas Frey-OBG Field Splice W13/W14 (Observation of the welding and QC inspection of "D2" Plate and "A5"), OBG Field Splice W13/W14 (Observation of Repair Welding (R2 repair cycle) and QC Inspection of Plate "D1") and OBG W12/W13 (QA/MPT verification of plate "F").

Joselito Lizardo-OBG E11 (Observation of the welding on the Lifting Lug Holes) OBG E13/E14 Field Splice (Observation of Welding and QC inspection on "E2" Side Plate and repair welding of "F" Edge Plate), FW Spencer, South Tower Shaft (Observation of the utility pipe welding) and one (1) issue was noted in regards to an arc burn on the "A" deck in close proximity of the field splice W13/W14, Segment A1.

Art Peterson-CCO: 179 Item 2-Continued observation of the welding and QC Inspection of the pipe sleeve at the bike path divider panels and installation of the pipe sleeve at the South Rail Divider and CCO: 193-Observation of modification of bike path panels at the expansion joints.

William Clifford-OBG W11 (Observations of welding, repair welding and QC inspection/testing of lifting lug

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holes), OBG Field Splice W12/W13 (Observation of QC/UT inspection "D2"), OBG W14(Observation of QC/UT inspection of ventilation holes) and OBG W13/W14 field splice (QA Verification of "I" plate).

### Quality Assurance Lead Inspector (QALI) Summary

This QA Lead Inspector (QALI) observed the QA Inspector's Douglas Frey, Art Peterson, Joselito Lizardo and William Clifford and Joselito Lizardo monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures for compliance with the contract specifications. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift, this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications and no issues were noted on this date. For additional information see Summary of Conversation. See QA daily Weld Inspection Reports (WIR) for additional information and details.

This QA Inspector continued the daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders (OBG, Longitudinal and Transverse "A" Deck Stiffeners, Deck Access Holes and the Tower Shear plates).

### Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

In regards to CCO: # 182, Mr. Peterson and this QALI discussed and reviewed the aforementioned CCO regarding the development of a spread sheet to confirm the status of the existing light supports attached to the west bound counterweights to be removed as per Lighting Details No. 3, sheet no. 907S1. At this time safety apparatus is required to perform a complete visual observation.

Also, this QALI was informed by QAI inspector Joselito Lizardo that during the act of relocating welding equipment to a new work area that electrical cable inadvertently was disconnected and made contact with the steel deck and generated an arc which burned into the deck. This area was ground flush with the base metal and Magnetic Particle Testing was performed by QC and in conclusion of the testing indications were noted. Under the direction of this QALI, Mr. Lizardo generated an incident report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Reyes,Danny	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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